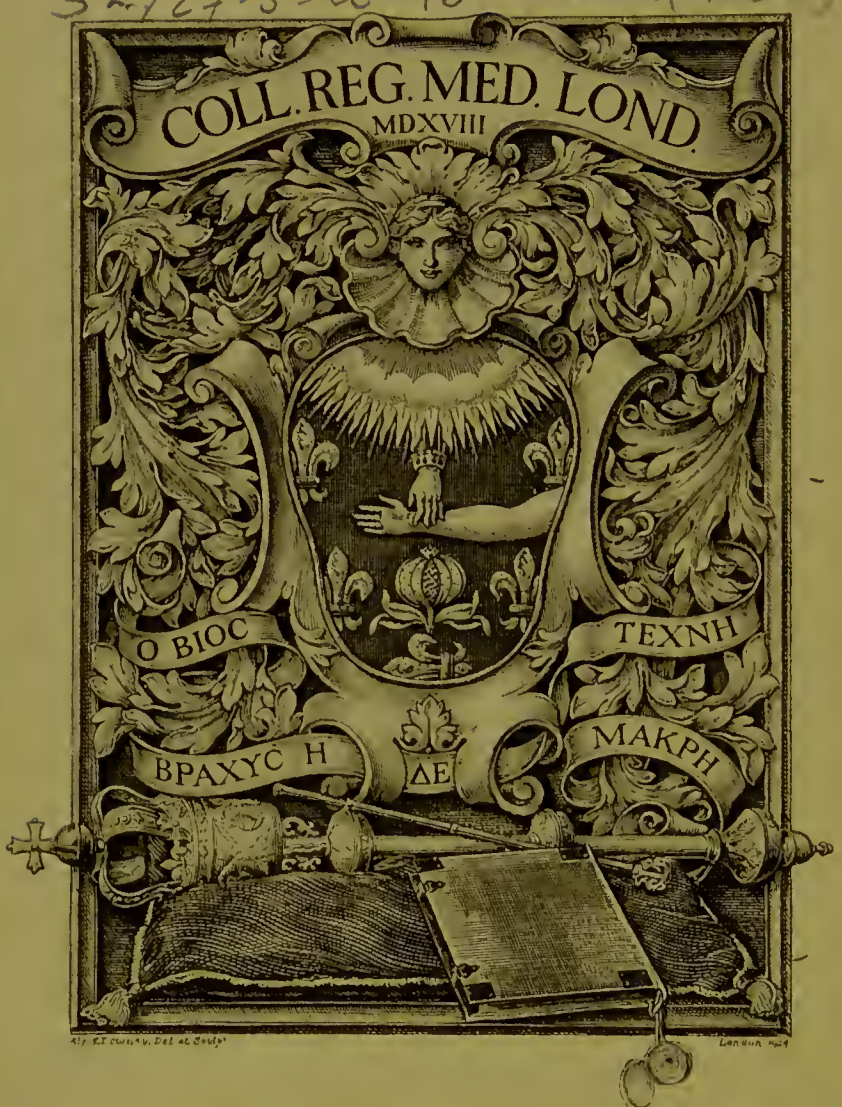

FIRST EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December 9, 1864.

No. I.

Physics.

1. Explain the terms Molecule, Elasticity, Inertia, Force.

2. Prove the impossibility of constructing a machine for producing perpetual motion.

3. Define the centre of gravity of a body. What properties has the centre of gravity (1) with respect to the equilibrium of the body, (2) with respect to its motion?

4. Mention any properties which all elastic fluids possess in common.

5. What are the mechanical principles upon which the use of a pendulum in a clock, and of a balance wheel in a watch, depends?

6. Distinguish between *quantity of heat* and *temperature*; and describe the processes by which the specific heats of bodies are determined.

7. What are the advantages and disadvantages of warming by open fire-places, by hot air, hot water, and steam, respectively?

8. What do you understand by the mean temperature of a place? By what observations is it determined, and what are the causes which make the mean temperature of one place to differ from that of another?

9. Describe the decomposition of light by a prism. What are Fraunhofer's lines; what is their use in the construction of optical instruments, and what is the physical explanation of their existence?

10. What evidence is there of the identity of frictional and of Voltaic electricity?

11. Show how an induced electrical current can be obtained from a permanent steel magnet, or from the earth.

12. What explanations can you give of the following phenomena:—halos, water-spouts, hoar frost, hail?

FIRST EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December 9, 1864.

No. II.

Practical Chemistry.

1. Analyse the substances marked (*a*) (*b*) (*c*) for one acid and one base.

2. Examine the solution *A* for Antimony and Arsenic, and solution *B* for Hydrocyanic Acid.

FIRST EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December 9, 1864.

No. III.

Chemistry.

1. What are the proportions respectively required of Carbonate of Potash, Carbonate of Soda, and Caustic Magnesia to neutralize a given quantity of Sulphuric Acid?

2. What formula would you assign to a substance which gave the following results to analysis :—

Carbon	54·35
Hydrogen	9.11
Oxygen	36.54
	100.00

and of which the vapour density was 3.05.

3. What observations are required for the accurate comparison of the volumes of two gases, and for what reasons?

4. Give the Chemical Formulæ of the following substances :—Hydrocyanic Acid, Formic Acid, Oxalic Acid, Calomel, Corrosive Sublimate, Arsenious Acid, Tartar-Emetic, Chlorate of Potash.

5. Explain briefly how each of the substances named in the preceding question may be best prepared.

6. What are the constituents of cows' milk, and how may they be separated?

7. How may Glucose be prepared and detected?

8. Give the ratio which equal volumes of the following gases bear to the volumes of the elements of which they consist :—Hydrochloric Acid, Water, Protoxide of Nitrogen, Binoxide of Nitrogen, Ammonia.

FIRST EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December 9, 1864.

No. IV.

Anatomy and Physiology.

1. Make a sketch of the walls of the Thorax together with the Viscera they contain; and state the variations which may and do take place in the relations they hold to each other consistently with health.

2. Give an account of the distribution, functions, and connections, of the Glossopharyngeal Nerve.

3. What properties must a substance possess to justify you in speaking of it as a "Food?" Classify such substances.

4. Give an account of the assimilation of Nitrogen by Plants, and of the excretion of it by Animals.

5. What are the microscopic appearances presented by the more common varieties of Starch, and in what do their Chemical reactions differ from those of Dextrin and Inulin?

6. What are the characteristics of the Human Fœtus at seven months?

7. Give a short account of the several substances known as Hæmatocrystallin, Hæmatoidin, Hæmatin, Chlorophyll, Biliverdin, Taurin, Excretin, Glycogen, Gluten, Legumin.

8. Contrast and compare the microscopic Anatomy of the Aorta with that of a Vena Cava.

9. What conditions necessarily follow, what are known to modify powerfully the working of Apnæa?

10. What are the various conditions which affect the Phænomena known as "Rigor Mortis?"

11. Write an account, and give a sketch of the relations of the Ciliary Muscle in the Human Eye.

12. Give the Natural History of some venomous animal, or of some parasite, to the attacks of which our own species is subject.

FIRST EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December 9, 1864.

No. V.

Practical Examination. Anatomy.

1. Write a detailed description of two dissections made on the same side of the subject placed before you.

2. Give an account of the bone put before you, stating the purposes subserved during life by its several foramina and facets, and enumerating the different nerves and vessels which were then in relation with it.

3. What is the object under the Microscope? Give an account of the several tissues which make it up.

4. Describe at length the Preparation labelled No. 2.

5. Write a description of the Plants labelled 3, 4, and 5, stating the Natural Orders to which they belong, and the chief products of use in the Arts with which those Natural Orders furnish us.

SECOND EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December 2, 1864.

No. I.

Pathology.

Medical, Surgical.

1. Describe the microscopical appearances of typical specimens of encephaloïd Carcinoma, and Fibro-plastic growth.

2. Describe the condition called Leucocythemia.

3. Distinguish between what are termed Typhus and Typhoïd Fever.

4. What causes may produce general Anasarca?

5. Under what several conditions is the Urine found to contain (1) Albumen, (2) Sugar, and (3) Pus globules?

6. By what conditions is Jaundice produced; and in which may it be considered remediable either by nature or by art?

7. Enumerate the characteristics of what is termed 'general Paralysis of the Insane:' and state the diseases for which it may be mistaken.

8. By what symptoms would you form a diagnosis of Hæmorrhage into the spinal cord?

9. Enumerate the varieties of Hernia that occur in the abdomen; and enumerate the swellings which may occur in the inguinal and scrotal regions, besides inguinoscrotal Hernia.

10. Describe the various modes of growth in Fibrous Tumours of the Uterus.

SECOND EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December 2, 1864.

No. II.

Materia Medica, Pharmacy.

1. What officinal preparations of the British Pharmacopœia contain Opium, and in what proportions?

2. Mention the chief Diuretics used in England, and give the doses of their several preparations.

3. Enumerate the "mixtures" for which directions are given in the British Pharmacopœia and state their composition.

4. What is the composition of the Pulvis Jalapæ compositus, of the Pilula Scillæ composita, of the Liquor Morphiæ hydrochloratis, and of the Liquor Strychniæ of the British Pharmacopœia?

5. Name the medicines which impart colouring matter to the excretions.

6. What are the preparations of Iron in the British Pharmacopœia? For what purpose is Ferri Peroxidum Hydratum used? How is it ordered to be made?

7. What classes of medicines are fitted for preparation by means of decoction and of infusion respectively? How are liquid extracts made?

8. What is the temperature at which Linseed, Mustard, Charcoal, and Yeast Poultices are to be made?

9. Explain the principle of Volumetric Analysis.

10. Give the equivalents of the weights and measures employed in the British Pharmacopœia, in French weights and measures.

SECOND EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December 2, 1864.

No. III.

Therapeutics.

1. Give an outline of the mode of treatment you would employ in a case of acute Rheumatic Fever.

2. How would you treat a case of Pneumonia supervening upon Delirium Tremens, and what would probably be the result of your treatment?

3. What steps are required by the law of England to be taken before a person of unsound mind can be put under bodily restraint?

4. What would be your line of treatment in a well marked case of Pyæmia?

5. Bearing in mind the several causes of Uterine Hæmorrhage, what ought to be the treatment of the various forms of this affection?

6. What steps would you take if a woman previously healthy, were seized with convulsions during labour?

7. What measures would you adopt in treating a case of Spasmodic Stricture of the Urethra?

8. What are the indications for the use of, and contra-indications against the use of, Elaterium, Digitalis, Aloës, and Copaiba, severally in various diseases?

9. What are poisonous doses of the officinal preparations of Opium respectively? How do you treat deep narcotism from that drug?

SECOND EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December 2, 1864.

No. IV.

Forensic Medicine and Hygiene.

1. By what symptoms would you seek to form a diagnosis between intoxication from alcoholic drinks, and concussion of the brain?

2. How would you proceed for the purpose of testing the contents of the stomach of a person suspected of having been poisoned by Arsenic?

3. What are the symptoms of a poisonous dose of Belladonna and of Hydrocyanic Acid?

4. What are the symptoms of poisoning by Oxalic Acid, and what the post mortem appearances?

5. What evidence would satisfy you that an infant found dead had not breathed?

6. What are the several ways by which a room, or a ward, may be ventilated?

7. What impurities have been detected in the air of sick rooms?

8. How is Typhoïd Fever said to be propagated?

9. Under what conditions is drinking water usually contaminated by Lead?

10. Can you state any diseases which make butchers' meat wholly unfit for human food?

SECOND EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December 2, 1864.

No. V.

Clinical Examination.

(*a*) *At the Radcliffe Infirmary.*

1. Write a Report on the cases of

, Ward,

and

, Ward,

giving with care the history, diagnosis, and prognosis of the cases, and also the treatment you would recommend. Add such general remarks as occur to you by way of Clinical comment on such cases.

(*b*) *At the Museum.*

2. Examine (writing a methodical account of your plan of examination) the Urine marked A.

3. Describe and sketch from microscopical examination the object marked B.

4. Describe the morbid product marked C.

SECOND EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December 2, 1864.

No. VI.

Translate :—

Eques erat ornatissimus, annos natus quinque et sexaginta, sed robustis membris et proba humorum temperie, nisi quod ante annos aliquot diuturnis et contumacibus crurum ulceribus laboraverat: quae pertaesus remediis qua internis qua externis tandem persanaverat. Is novissime rheumaticis doloribus subinde obnoxius, sed levibus adeo ut qui domo exire non prohiberent, quod et pridie fecerat quam moreretur, iis acerbius prehensus est V. Nonas Junias ad sternum quidem et brachia, non sine capitis perturbatione. Quibus per ea quae sunt visa magis idonea cum occursum esset, jam circa meridiem magna ex parte relevatus, quamvis infirmo pulsu, alacriter se gerebat. A prandio cum quievisset, expergefactus, eosdem quos mane dolores sensit. Quapropter inambulare in conclavi coepit; sic enim illos facilius ferebat. Sed postquam satis id fecerat, cum lectum repetiisset, querebatur de fumis ad caput ascendentibus, et de pectoris angustiis, inquietusque sese huc illucque vertebat. Quod cum spatio temporis non brevi fecisset, repente se mori sensit, simulque pallens et se agitans illico interiit. Abdomine diducto, inventa sunt omnia secundum naturam. Pectore autem aperto, et pulmonibus, qui antrorsum compulsi erant, dimotis, pericardium deprehensum est nigro, concretoque sanguine distentum. Is e sinistro cordis ventriculo exierat per scissuram longam unciae dimidium et secundum illius longitudinem ductam, circa quam cordis fibrae non recenti corrosione exesae conspiciebantur. *Morgagni.* De Sed. Mor. II. 27, 8.

Relate any similar case which you may have seen or heard of: and state the probable condition of the Cardiac Muscular Fibres.

Translate :—

Μανίης τρόποι εἴδεσι μὲν μυρίοι, γένεϊ δὲ μοῦνος εἷς· ἔκστασις γάρ ἐστι τὸ σύμπαν χρόνιος, ἄνευθεν πυρετοῦ· εἰ γάρ κοτε καὶ πυρετὸς ἐπιλάβοι, οὐκ ἀπὸ μανίης ἂν ἴδιος γίγνοιτο, ἀλλ' ἐκ συντυχίης ἄλλης· ἐκφλέγει γὰρ καὶ οἶνος ἐς παραφορὴν ἐν μέθῃ· ἐκμαίνει δὲ καὶ τῶν ἐδεστῶν μετεξέτερα, ἥ μανδραγόρη, ἥ ὑοσκύαμος, ἀλλ' οὔ τί πω μανίη τάδε κικλήσκεται. ἐπὶ γὰρ σχεδίου γιγνόμενα καθίσταται θᾶττον· τὸ δὲ ἔμπεδον ἡ μανίη ἴσχει· τῇδε τῇ μανίῃ οὐδέν τι ἴκελοι ἡ λήρησις, γήραος ἡ ξυμφορή. αἰσθήσιος γάρ ἐστι νάρκη, καὶ γνώμης νάρκωσις ἠδὲ τοῦ νοῦ ὑπὸ ψύξιος· μανίη δὲ θερμόν τι καὶ ξηρὸν τῇ αἰτίῃ, καὶ ταραχῶδες τῇσι πρήξεσι· ἡ μὲν γὰρ λήρησις ἀρχομένη ἀπὸ γήραος οὔτε διαλείπει, καὶ ξυναποθνήσκει· μανίη δὲ καὶ διαλείπει καὶ μελεδῶνι ἐς τέλος ἀποπαύεται· διάλειψις δὲ ἀτελὴς, ἣν τῷ τῆς μανίης λόγῳ γίγνηται, οὐκ εἰκότως ἀκεομένου τοῦ κακοῦ ἰητρείῃ, ἢ τῆς ὥρης εὐκρασίῃ. μετεξετέρους γὰρ δοκέοντας ἀσινέας ἔμμεναι, ἡ ὥρη τὸ ἔαρ, ἢ ἁμαρτωλὴ διαίτης, ἢ ὀργὴ ἐκ συντυχίης ἐς ἀνάκλησιν ἤγαγε.

Aretæus.
Χρον. Παθ. Α. ϛ'.

Translate :—

Ἐν τροφῇ γὰρ κείσεται τὰ φάρμακα.

Ib.

Illustrate this aphorism from modern experience.

Michaelmas Term, 1865.

EXAMINATIONS FOR THE DEGREE OF M.B.

Under the Statute of 1860.

FIRST EXAMINATION.

Monday, Dec. 11. In the Anatomical Department of the Museum.
10 a.m. to 1 p.m. Practical Anatomy.
2 to 5 p.m. Paper on Anatomy and Physiology.

Tuesday, Dec. 12. Chemical Department.
10 a.m. to 1 p.m. Practical Chemistry.

Medical Department.
2 to 5 p.m. Paper on Chemistry.

Wednesday, Dec. 13. Medical Department.
10 a.m. to 1 p.m. Paper on Physics.

Thursday, Dec. 14. Medical Department.
General *vivâ voce*.

SECOND EXAMINATION.

Monday, Dec. 11. Medical Department.
10 a.m. to 1 p.m. Pathology.
2 to 5 p.m. Therapeutics.

Tuesday, Dec. 12. Medical Department.
10 a.m. to 1 p.m. Diseases of Women and Children, and Principles of Surgery.
2 to 5 p.m. Forensic Medicine and Hygiene.

Wednesday, Dec. 13. Radcliffe Infirmary.
9.30 to 11.30 a.m. Clinical Examination.

Medical Department of Museum.
1 p.m. *Vivâ voce* and Classical Paper.

Under the Statute of 1834.

Friday, Dec. 8. In the Medical Department.
11 a. m. Chemistry and Botany.

Saturday, Dec. 9. Anatomical Department.
10 a. m. to 1 a. m. Practical Anatomy.
2 to 5 p. m. Paper on Anatomy and Physiology.

Monday, Tuesday, and Wednesday, Dec. 11, 12, 13.

This Examination is continued simultaneously with the Second Examination of the Statute of 1860.

GEORGE ROLLESTON, M.D.
HENRY SMITH, M.A.
AUGUSTUS VERNON HARCOURT, M.A.

THOMAS K. CHAMBERS, M.D.
JOHN W. OGLE, M.D.

HENRY W. ACLAND, Reg. Prof. Med.

Oxford Museum,
December 3, 1865.

FIRST EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1865.

No. I.

Physics.

1. What are the Volume, the Mass, and the Weight of a body? Has the same body the same weight under all circumstances?

2. What is the law of universal gravitation? How is it proved to be true?

3. Shew that the weight of a body floating in a fluid is equal to the weight of the fluid it displaces, and that the centres of gravity of the body and of the displaced fluid are in the same vertical line.

4. What is the principle of a barometer? What corrections have to be applied to the reading of a cistern barometer?

5. By what means are the highest and the lowest known temperatures obtained, and how are such temperatures measured thermometrically?

6. What is the boiling point of a fluid? What causes will raise or lower the boiling point?

7. What reasons are there for supposing heat to be a form of motion?

8. Explain the formation of images by a plane mirror, and by a convex lens.

9. How do you account for the colours of a rainbow, of a soap-bubble, of mother-of-pearl?

10. Describe some form of Polariscope.

11. Two insulated spherical conductors (charged with the same electricity) are suspended near one another. What influence will they exercise upon one another?

12. How can the intensity of two Voltaic currents be compared?

13. What hypotheses have been invented to explain the phænomena of magnetism?

FIRST EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1865.

No. II.

Practical Chemistry.

1. Each of the tubes, *a*, *b*, *c*, *d*, contains a single substance.

2. The solution *e* is to be examined for hydrocyanic acid, and the solution *f* for iron and magnesia.

3. Under what circumstances can you obtain a fixed gas from the solid substance *g*, and what is the nature of the gas ?

FIRST EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1865.

No. III.

Chemistry.

1. What other substances besides Oxygen and Nitrogen may be found in Atmospheric Air? By what tests is their presence or absence indicated?

2. Why is rain water always 'soft'? Describe and explain the method of estimating quantitatively the 'hardness' of water.

3. How would you examine a sample of water for (1) Lead, (2) Nitrates, (3) Organic matter? Under what circumstances is water liable to contain each of these?

4. Give an account of some method by which Arsenic may be detected in the presence of organic substances.

5. What reactions do the solutions exhibit which are obtained by dissolving (1) Iron and (2) Tin in Hydrochloric and Nitrohydrochloric acids respectively?

6. Give some account of the metal Antimony and its combinations.

7. Describe the modes of preparation and the properties of Carbonic Oxide.

8. How are Ether, Bisulphide of Carbon, and Chloroform prepared?

9. Describe the process by which the percentage composition of a substance consisting of Carbon, Hydrogen, and Oxygen is determined.

10. What other substances besides those named in the preceding question may an organic substance contain, and how is their presence discovered?

FIRST EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1865.

No. IV.

Anatomy and Physiology.

1. Enumerate the various agencies which aid the propelling power of the heart in carrying on the circulation and elucidate their mode of action.

2. Give an account of the various arrangements by which the special requirements of the intracranial circulation are provided for.

3. What are the various physiological conditions which are known to increase or diminish the amount of Carbonic Acid exhaled from the lungs ?

4. Write a description of the Anatomy of the knee joint.

5. What are the different muscles employed and the different types of movement observable under varying Physiological conditions in the act of Respiration ?

6. Give the minute Anatomy of a Lymphatic, a Lieberkahnian, and a Brunner's Gland.

7. What has Experimentation shewn as to the functions of the Cervical Sympathetic ?

8. Give an account of the relations and connexions subsisting between the Amnios, Allantois, and Umbilical Vesicle in the human Fœtal envelopes.

9. What is the Natural History of the different organisms known by the name of " Hydatids ?"

10. Give an account of the vegetable growths known as the " Yeast Plant" and the " Vinegar Plant."

FIRST EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1865.

No. V.

Anatomy.—Practical Examination.

1. Make such a dissection of the organ put before you as will enable you to demonstrate and describe the greatest number of its internal structures and external appendages visible in one view. State any points in which these structures and appendages differ from those similarly placed in the Human Subject.

2. Place under the Microscope some of the muscular fibres which are to be found in the preparation you have made; and state the points in which such fibres differ from those of the heart and from those of the muscular coat of the Intestines.

3. Give an account of the bone put before you, particularizing the various muscles, vessels, and nerves which were in relation with it during life.

4. Describe at length one or other of the three Preparations put before you and labelled 2, 3, and 4.

5. Write a description of the Plants labelled 5, 6, and 7, and give a short account of the Natural Orders to which they belong.

SECOND EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1865.

No. I.

Pathology.

1. Describe the general appearance and the microscopical structure of a lung affected by pneumonia, discriminating between the several stages of the disease.

2. State the pathology of Diabetes mellitus, and mention other forms of disease with which it is apt to be associated.

3. What are the varieties of softening which are found in the cerebro-spinal axis, and what are the most usual causes of the disease in the several parts of that structure ?

4. Mention the best known varieties of Pityriasis, and describe their microscopical characters.

5. Give a sketch of the natural history, and shortly describe the external appearance, of the entozoa found in the human abdominal viscera in this country.

6. State the chemical composition of biliary calculi.

7. What are the causes of the condition described as Angina Pectoris ?

8. Give the differential diagnosis between Syphilis in the infant, Varicella, Varioloid, and Variola, as usually described.

SECOND EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1865.

No. II.

Therapeutics.

1. How would you treat a case of Rheumatic Fever and its most common complications?

2. What treatment would you ordinarily pursue in the Delirium of Typhus, and in the severe Diarrhœa of Typhoïd Fever?

3. When are topical applications to the Pharynx, or Larynx, desirable? How do you apply them, and with what object? What drugs are used for the purpose, and in what doses?

4. State the most usual modes of treating Syphilis in its several stages or varieties.

5. What indications for treatment do you gather from microscopical examination of the urine?

6. Enumerate the counter irritants contained in the British Pharmacopœia, and state under what circumstances you would have recourse to the use of each.

7. Describe the various modes in which water may be used externally as a Therapeutical agent, and name the cases to which each is suited.

8. What are the doses of the Pharmacopœial preparations of Arsenic, Copper, Opium, Belladonna, Strychnia, and Cinchona?

SECOND EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1865.

No. III.

Diseases of Women and Children, and Surgery.

1. Enumerate the sources of haemorrhage from the organs of generation in the female, and state the mode of treatment in each case.

2. State the signs of Pregnancy.

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3. With what diseases may Scarlet Fever and Croup be confounded, and how would you distinguish them from those diseases ?

4. Describe Muguet—its causes, nature, and treatment.

---

5. How would you perform the operation of tapping the abdomen and the thorax, and in what pathological states may it be expedient to resort to it ?

6. What are the circumstances which determine the selection of Lithotomy or Lithotrity in the treatment of Stone.

7. What are the chances of the return of Cancer after its removal from the Breast.

SECOND EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1865.

No. IV.

Forensic Medicine and Hygiene.

1. State the symptoms of poisoning by Sulphuric Acid, Phosphorus, and Strychnia.

2. What are the symptoms of poisoning by Carbonic Acid, under what circumstances does it usually occur, and how would you prevent them?

3. How would you ascertain whether the dead body of a child found in the water had ever breathed?

4. What amount of cubic space is required for each bed in a hospital ward? How do you ascertain the rate of change in the Air in a ward? and state the ordinary impurities which may exist in vitiated Hospital Air and the methods in use for examining them.

5. What are the diseases which are or are supposed to be caused by impure water?

6. What are the best disinfectants for a sick room? How far are disinfectants of use? and state the principles on which those act which you enumerate.

SECOND EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1865.

No. V.

Clinical Examination.

1. Examine
in Ward, and
in Ward, and report on their cases.

2. Describe minutely on paper the pathological state of
in
Ward; giving the history in full, and your opinion as to the probable effect of remedies in such a case.

3. Examine and write an account of the Urine marked *a* and the fluid marked *b* in the Clinical Room.

4. What is the temperature of
, and how far does it deviate from the normal state?

SECOND EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1865.

No. VI.

Opus etiam esse cucurbitula potest in morbis longis, quamvis et iis jam spatium aliquod accessit; sive corrupta materia, sive spiritu male habente: in acutis quoque quibusdam, si et levari corpus debet, et ex vena sanguinem mitti vires non patiuntur. Idque auxilium ut minus vehemens, ita magis tutum; neque umquam periculosum est, etiamsi in medio febris impetu, etiamsi in cruditate adhibetur. Ideoque ubi sanguinem mitti opus est, si incisa vena praeceps periculum est, aut si in parte corporis etiam vitium est, huc potius confugiendum est: cum eo tamen, ut sciamus, hic ut nullum periculum, ita levius praesidium esse; nec posse vehementi malo, nisi aeque vehemens auxilium succurrere.

Celsus. Lib. 2. § 11.

Τάμνειν δὲ τὴν ἐπ' ἀγκῶνι τὴν κοίλην· ἀτὰρ ἠδὲ διὰ σμικρῆς τῆς σχάσιος ἀφαιρέειν, ὡς μὴ σφόδρα τῇ δυνάμει ἐπίδηλον ᾖ. ἐλέγχει γὰρ τὴν φύσιν τὸ ἀθρόον· καὶ πολλόν τι μεῖον ἢ δι' ἄλλας προφάσιας ἀφαιρέειν. ἦν γὰρ ἐπὶ συγκοπῇ καὶ σμικρὸν ἁμαρτῴη, ῥηϊδίως εἰς ᾅδου τρέπει. αὐτίκα ων διδόναι τροφὴν ἐς νεόχμωσιν τῆς δυνάμιος· γάνυται γὰρ ἡ φύσις καὶ τῇ τῶν παλαιῶν ἀπαλλαγῇ, καὶ τῇ τῶν ποταινίων προσθήκῃ. Ἦν δὲ φλεβοτομίην μὲν ἡ δύναμις

ἀποτρέπῃ, φλεγμασίαι δὲ ἔωσι, σικύην τῇδε προσβάλλειν πολὺ πρόσθεν τῆς κρίσιος τοῦ νοσήματος. ἐν κρισίμοισι γὰρ ἡ συγκοπή· ἐπεὶ τῇσι αὐτέῃσι περιόδοισι αἵ τε φύσιες κρίνουσι, αἵ τε νοῦσοι κτείνουσι. κἢν γὰρ ἐς ἀνάγκην οἰνοποσίης ἥκῃ ὁ ἄνθρωπος, οὐ κάρτα ἀσφαλὲς ἐπὶ φλεγμονῇσι οἰνοποτέειν. οἶνος γὰρ φλεγμαίνουσι μὲν πόνων ἐπίδοσις, ἀφλεγμάντοισι δὲ φύσιος αὔξησις. ἐπίπροσθεν δὲ τῆς σικύης, πρὸ μιῆς ἢ δευτέρης, ἐπιπλάσιος χρέος, ἔς τε ἄνεσιν τῶν μερέων, ἀτὰρ ἠδὲ ἐς εὐροὴν τοῦ αἵματος· μετεξετέροισι δὲ καὶ ἐπὶ τῇ σικύῃ ἐς τὴν δευτέρην ἐπιπλάσσειν. ἔστω δὲ καὶ τῇδε φειδώ· κίνδυνος γὰρ αὐτὸς τοῦ αἵματος τῆς ἀμετρίης καὶ ἐπὶ τῇ σικύῃ. κλυσμοῖσι δὲ ἐπὶ σκυβάλοισι παλαοῖσι μοῦνον χρέο· τῆς δυνάμιος δὲ φείδεο.

Aretæus.

Περι Θερ. Οξ. Παθ. Β. γ.

Translate these passages, and criticize them by the light of Modern Pathology and Practice. State in what cases you would endorse, and in what you would dissent from the treatment here recommended by Aretæus.

Oxford Museum, Michaelmas Term, 1866.

EXAMINATIONS FOR THE DEGREE OF M.B.

FIRST EXAMINATION.

Monday, Dec. 10. In the Anatomical Department of the Museum.
10 a. m. to 1 p. m. Practical Anatomy.
2 to 5 p. m. Paper on Anatomy and Physiology.

Tuesday, Dec. 11. Chemical Department.
10 a. m. to 1 p. m. Practical Chemistry.
Medical Department.
2 to 5 p. m. Paper on Chemistry.

Wednesday, Dec. 12. Medical Department.
10 a. m. to 1 p. m. Paper on Physics.

Thursday, Dec. 13. Medical Department.
Noon. Examination *vivâ voce*.

SECOND EXAMINATION.

Tuesday, Dec. 11. Medical Department.
2 to 5 p. m. Pathology.

Wednesday, Dec. 12. Medical Department.
10 a. m. to 1 p. m. Therapeutics.
2 to 5 p. m. Forensic Medicine and Hygiene.

Thursday, Dec. 13. Radcliffe Infirmary.
9.30 to 11.30 a. m. Clinical Examination.
2 to 5 p. m. Diseases of Women and Children, and Principles of Surgery.

Friday, Dec. 14. Medical Department of Museum.
10 a. m. Classical Paper. Examination *vivâ voce*.

GEORGE ROLLESTON, M.D.
AUGUSTUS VERNON HARCOURT, M.A.
ROBERT B. CLIFTON, M.A.

THOMAS K. CHAMBERS, M.D.
JOHN W. OGLE, M.D.

HENRY W. ACLAND, Reg. Prof. Med.

} Examiners.

FIRST EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1866.

No. I.

Physics.

1. Define a *lever*, and state its mechanical advantage. Into what classes have straight levers been divided? Describe the mechanism by which the human arm is bent and extended.

2. Describe the variations which the effective force of gravity undergoes in sustaining the motion of a simple pendulum.

How is the pendulum employed in determining the accelerating effect of the force of gravity?

3. Describe the common Hydrometer, and the method of using it.

4. When a fine tube open at both ends is dipped in a liquid, describe the principal phenomena observed, and state the laws which they are found to obey.

To what forces are these phenomena to be ascribed?

5. Describe the construction and action of a *free reed* organ pipe.

Explain upon the principle of the free reed the action of the human organs of speech.

6. Describe the structure of the eye, considered as an optical instrument, and trace the course of the pencils of light which produce the image on the retina, illustrating by a figure.

What is the nature of the defect known as *regular astigmatism*, what is its cause, how is it detected, and how remedied?

[Turn over.

7. When plane polarised light, after passing through a tube filled with an aqueous solution of sugar, is plane analysed, what phenomena are observed?

Describe Biot's Saccharometer, and the method of using it for determining the amount of sugar present in diabetic urine.

8. Describe experiments shewing the conversion of work into heat (1) directly, (2) indirectly through electricity.

How much work must be done upon half a kilogram of copper (specific heat 0·095) in order to raise its temperature from 10°C to 20°C?

9. Describe any experiment which shews that when a liquid changes into a vapour heat disappears.

How is the latent heat of a vapour estimated? How has it been proposed to employ the absorption of heat attending the change from the liquid to the gaseous state as a means of destroying sensation in any part of the body, on which an operation is to be performed?

10. When a closed vessel containing a gas is heated at the bottom, explain how the gas becomes heated throughout.

In ventilating a room, at what places should the cold air be admitted? Give your reasons for your answer.

11. When a plate of copper, and a plate of amalgamated zinc are placed in a vessel containing dilute sulphuric acid, state what takes place (1) when the plates are not connected, (2) when they are connected by a wire.

12. Describe Œrsted's experiment as to the action of an electric current on a moveable magnetic needle.

Explain the construction of Nobili's astatic Multiplier.

In physiological research should the Multiplier be constructed with a long or a short coil? Give your reasons for your answer.

FIRST EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1866.

No. II.

Practical Chemistry.

1. Each of the tubes, *a*, *b*, *c*, contains a single substance.

2. Examine the solution *d* for iodine, and the solution *e* for morphia.

3. Prepare some carbonic acid gas, and determine approximately what proportion of this gas mixed with air is sufficient to extinguish the flame of a taper.

FIRST EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1866.

No. III.

Chemistry.

1. In what relation do the chemical elements stand to the other kinds of matter on the earth's surface? Why are air and water, respectively, no longer regarded as elements?

2. By what methods may oxygen be prepared?

3. What are the sources and properties of ammonia?

4. In what metallic solutions does sulphuretted hydrogen produce precipitates in presence of an acid? How is this gas prepared?

5. What are the principal constituents of coal gas?

6. Describe the mode of preparation and properties of iodide of potassium.

7. How is phosphorus obtained?

8. Explain briefly the method of spectrum analysis, and state some of the discoveries which have resulted from its application.

9. How would you ascertain qualitatively the chemical composition of a tubercle?

10. Write a short account of the principal chemical changes to which the name 'fermentation' has been given.

FIRST EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1866.

No. IV.

Anatomy and Physiology.

1. Give an account of the different ways in which the Nervous system may influence the functions of organic or vegetative life.

2. What do you know of the development, relations, and functions of the Eustachian Tube?

3. Write an account of the origin, course, and functions of the chorda tympani, the buccal, the musculospiral, and the obturator nerves.

4. What are the physiological limits within which the size of the liver may vary, and what are the conditions which produce such variations?

5. Trace the course taken by the chyle from its formation up to the spot where it is poured into the blood-vascular system.

6. Enumerate the different muscles, membranes, and vessels which you would meet with in dissecting from the external integument down to the level of Cowper's glands.

7. Give some account of the organisms known as "Infusoria," "Vibriones," and "Bacteria." What relations have they been supposed by different authorities to hold to the production and to the products of Fermentation and Putrefaction?

[Turn over.

8. Explain what is meant by the Botanical Terms "Stomata," "Primordial Utricle," "Cambium Layer;" and give a short history of the physiology of the sap.

9. What are the distinctive characters of the classes Vermes and Arachnida? Specify parasitic members from each of these classes.

10. What are the main points of difference and what the main points of interdependence existing between the Animal and Vegetable Kingdoms?

FIRST EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1866.

No. V.

Anatomy.—Practical Examination.

1. Make such a dissection of the organ put before you as will enable you to demonstrate and describe the greatest number of its internal cavities and structures which are visible in one view.

2. Place under the Microscope some of the tissue of which the greater part of the organ you have dissected is made up; and state the points in which it differs from tissue bearing the same name in other parts of the body.

3. What does the Microscope enable you to predicate of the organisms contained in the jar labelled No. 1 ?

4. Write a description of the plants labelled 2, 3, and 4, and give a short history of the Natural Orders to which they belong.

5. Describe at length the preparation labelled No. 5, specifying the functions which its several component parts perform in life.

6. Write a short description of the Museum-Preparations, Nos.

SECOND EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1866.

No. I.

Pathology.

1. What influences are supposed to favour the deposition of scrofulous material in the lung? What tissues of the organ appear to be primarily concerned therein, and what are the microscopical characteristics of this material?

2. What is meant by Leukhæmia, and what are the symptoms which are apt to arise in those affected by it?

3. Enumerate the conditions in which Sugar and Albumen may be found in the urine. What value is to be attached to their presence under various circumstances?

4. Describe the structure of the lesions of the bowels in continued fever and phthisis.

5. Distinguish histologically the several skin diseases vulgarly confounded under the title "Ring-worm."

6. Distinguish between Gout and Rheumatism, acute and chronic.

7. What arguments have been advanced to shew a connection between Tubercle, Cancer, and Inflammation?

8. What is meant by "Symmetrical Diseases"? Cite some instances.

SECOND EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1866.

No. II.

Therapeutics.

1. What would be your treatment of acute Pericarditis in the adult; and by what circumstances would your treatment of this disease be modified?

2. How would you treat a case of Scarlet Fever? What affections are wont to arise in this disease; and what means would you adopt in counteracting them?

3. What line of treatment would you adopt if called to a case of well-marked Tetanus?

4. Comment on the uses of Opium.

5. What precautions against relapse would you recommend to an artisan cured of renal dropsy?

6. What conditions favour the formation of Carbuncles? How do you treat them?

7. What circumstances contra-indicate the use of Chloroform?

8. What are the uses of Digitalis?

9. What are the signs of an impacted Gallstone? What is to be done when it is supposed that a Patient is suffering from that cause?

SECOND EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1866.

No. III.

Forensic Medicine and Hygiene.

1. What are the symptoms and treatment of (1) poisoning by Opium, and (2) poisoning by Antimony? For what other affections are these forms of poisoning most likely to be mistaken?

2. What mode of procedure would you adopt in trying to detect the presence of Arsenic or Digitalin in the contents of the Stomach?

3. In examining the person of an adult woman who had deposed to a Rape having been forcibly committed on her twelve hours before, what signs would you seek (1) of coition having occurred, so as to legally establish the felony, (2) of consent having been withheld?

4. How would you endeavour to decide whether, in a given case, Suicide is an indication of Insanity?

5. What points would you chiefly observe in trying to identify with a description of a missing person a Skeleton, of which the soft parts had been destroyed?

6. What Disinfectants are now held to be of the most value? Classify and describe their modes of action. How would you treat the clothes of a person affected with Cholera?

7. How do you detect and estimate the impurities which are most commonly found in the Air of a Sick Ward?

8. What are the principal adulterations of Bread?

SECOND EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1866.

No. IV.

Diseases of Women and Children.—Principles of Surgery.

1. From what various conditions may suppression of Menstruation arise; and how are they to be dealt with respectively?

2. What are the chief causes of Acute Mania in adult women? Describe the affection and its treatment.

3. Under what circumstances is Ovariotomy to be recommended? Describe the operation.

4. What leads you to suspect retroversion of the Uterus? How is it to be treated?

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5. Enumerate the causes and modes of treatment (1) of Infantile Paralysis, (2) of Infantile Convulsions.

6. What are the symptoms of Infantile Syphilis?

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7. What are the points to observe in the diagnosis of strangulated Hernia?

8. State fully the symptoms and usual history of Schirrus of the Breast. What reasons incline you to advise or dissuade operation? What treatment other than removal has been recommended?

SECOND EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1866.

No. V.

Clinical Examination.

(*a*) *At the Radcliffe Infirmary.*

1. Examine the Patients in the Out-Patients' Hall.

2. Write a Report on the cases of

, Ward,

and

, Ward,

giving with care their history, diagnosis, and prognosis, and also the treatment you would recommend. Add such general remarks as occur to you by way of Clinical comment on such cases in general.

3. Examine the Urine marked A and B, Microscopically and Chemically, and write a methodical account of your plan of examination.

4. Make a Post Mortem Examination of the Body of

in the Mortuary, and demonstrate the Morbid Parts.

(*b*) *At the Museum.*

5. Describe and sketch from microscopical examination the object marked B.

6. Describe the preparation marked C.

SECOND EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1866.

No. VI.

Translate :—

Ξυνεχὴς μὲν οὖν ποδάγρη οὐ ῥηϊδίως γίγνεται, διαλείπει δὲ ἔσθ' ὅπη χρόνον μακρόν. λεπτὴ γάρ· καὶ Ὀλυμπίασι ἐνίκησε ποδαγρὸς ἐπ' ἀνέσει δρόμον. ἀλλ' ἄνδρες μὲν παθεῖν ῥηΐτεροι, γυναικῶν δὲ ἐλαφρότερον· γυναῖκες δὲ ἀραιότερον μὲν ἀνδρῶν, χαλεπώτερον δέ. τὸ γὰρ μὴ ἐν ἔθεϊ μηδὲ οἰκεῖον, ἢν ὑπὸ ἀνάγκης κρέσσον γένηται, βιαστὴν μέζονα τίκτει τὴν ξυμφορήν· ἡλικίη τὰ πολλὰ μὲν ἀπὸ ἐτέων πέντε καὶ τριήκοντα. θᾶσσον δὲ καὶ βράδιον ἐκ τῆς ἑκάστου φύσιος καὶ διαίτης. δεινοὶ μὲν οὖν οἱ πόνοι, καὶ τὰ παριόντα πόνων μέζονα· λειποθυμίη, ἐπὶ τῇσι ψαύσεσι ἀκινησίη, ἀποσιτίη, δίψος, ἀγρυπνίη· ἢν δὲ ἐπανέλθωσι, τοῦτο μὲν ὅκως ἐκ θανάτου πεφευγότες, ἄνετοι τὸν βίον, ἀκρατέες, ἁπλοῖ, εὔθυμοι, δωροδόκοι καὶ ἐς τὴν δίαιταν ἁβροί· τοῦτο δὲ ὡς ἐκ θανάτου αὖθις ἐσόμενοι ἄδην χρέονται τῇ παρούσῃ ζωῇ. ἀπέσκηψε πολλοῖσι ἐς ὕδρωπα ἡ ποδάγρη, ἄλλοτε δὲ ἐς ἆσθμα· καὶ τῶνδε ἄφυκτος ἡ διαδοχή.

Aretæus.

Χρονιων Παθων Σημειωτικον Βιβλ. Β.

Ut haec vasorum, in ejusmodi praesertim corpore, magna angustia initium fortasse fuerat morborum omnium, ita pancreatis, magisque Duodeni intestini duritiem vomitionum fuisse causam, non dubito. Sive enim id intestinum a compressione stringatur, ut olim animadvertit Riolanus, quem hic in Sepulchreto laudatum videbis, sive ob scirrhosas tunicas se minime possit constringere, oppositas hasce causas

[Turn over.

idem effectus sequitur, ut illapsura ex ventriculo cum minus facile aut excipiantur, aut ulterius promoveantur, nempe in ventriculo restent pleraque, ibique corrupta, aut mora ipsa gravia, et molesta impellant ad vomitum : cujus rei luculentum exemplum etiam protulit Cl. Molinellius. Idem contingat, necesse est, cum pylorus vitiis afficitur ejusdemmodi. Plurima autem hic in Sepulchreto habes exempla, ut Observatione XI. et XVII. et plerisque aliis insequentibus ferme usque ad XXVI. et rursus in LVI. § 13 in Additamentis autem Observatione I. et VIII. quin etiam alibi, ut libro I. Sect. IX. Observatione non solum XXXIV. sed insuper, si *subversiones* illas attendas, XXXIII. Inter illas autem quas Sectione VIII. hac leges, cum ad Observationem perveneris XXI. non ita dissimilem alterius quae a Joanne Bohnio est, in illaque vomitionem ciborum omnium, et mortem denique intra decimum diem consecutas invenies pylori occlusionem a nummo devorato exiguo argenteo ; veniet procul dubio in mentem nummi illius argentei tanto majoris quem solers Chirurgus *du Luc* inde, atque adeo extra corpus cum aliis auxiliis, tum hydrargyri praesertim et pondere urgentis, et *amalgamatione*, ut Chymici loquuntur, imminuentis feliciter deturbavit, cum jam laevi ad pylorum dolores incepissent cum vomendi voluntate.

Morgagni de Sed. Morb. Lib. iii.

For the use of the Examiners.

Oxford Museum, Michaelmas Term, 1867.

EXAMINATIONS FOR THE DEGREE OF M.B.

FIRST EXAMINATION.

Monday, Dec. 9. In the Anatomical Department of the Museum.

9.30 a. m. to 12.30 p. m. Practical Anatomy.

1.30 to 4.30 p. m. Paper on Anatomy and Physiology.

Tuesday, Dec. 10. Chemical Department.

9.30 a. m. to 12.30 p. m. Practical Chemistry.

Medical Department.

1.30 to 4.30 p. m. Paper on Chemistry.

Wednesday, Dec. 11. Medical Department.

9.30 a. m. to 12.30 p. m. Paper on Physics.

Thursday, Dec. 12. Medical Department.

11 a. m. Examination *vivâ voce*.

SECOND EXAMINATION.

Tuesday, Dec. 10. Medical Department.

9.30 a. m. to 12.30 p. m. Materia Medica.

1.30 to 4.30 p. m. Pathology.

Wednesday, Dec. 11. Medical Department.

9.30 a. m. to 12.30 p. m. Therapeutics.

1.30 to 4.30 p. m. Forensic Medicine. Hygiene.

Thursday, Dec. 12. Radcliffe Infirmary.

9.30 to 11.30 a. m. Clinical Examination.

Medical Department.

1.30 to 4.30 p. m. Surgery. Midwifery.

Friday, Dec. 13. Medical Department.

9.30 a. m. Classical Paper.

11 a. m. Examination *vivâ voce*.

AUGUSTUS G. VERNON HARCOURT, M.A.
ROBERT B. CLIFTON, M.A.
WILLIAM S. CHURCH, M.A., M.B.

THOMAS K. CHAMBERS, M.D.
JOHN W. OGLE, M.D.

HENRY W. ACLAND, Reg. Prof. Med.

} Examiners

FIRST EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1867.

No. I.

Anatomy—Practical Examination.

1. Dissect the orbit in the head before you.

2. Write a detailed description of the bone on the table; mention the muscles, ligaments, and tendons attached to it, with their places of origin or insertion.

3. What are the microscopical objects, Nos. i. ii. iii. iv.?

FIRST EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1867.

No. II.

Anatomy and Physiology.

1. Describe the movements of the Thorax during ordinary respiration. Mention the muscles concerned in producing them, describing the part which each takes in effecting the general result.

2. Give an account of the origin, course, and connexions of the Pneumogastric nerves. What results have been observed to follow section of these nerves ?

3. 'In the vegetable kingdom solar force is absorbed in the production of our food ; in the animal kingdom it is liberated by the eremacausis of our fat and glands and muscle.' Odling, *Lect. on Animal Chemistry.* Explain and illustrate these statements.

4. What are the functions of the Liver, and of its secretion ?

5. Write an accurate description of the fourth Ventricle of the Brain.

6. Examine into the nature of the forces which assist the Heart's action in maintaining the circulation of the blood.

7. What views are held with regard to the development of blood cells ; (1) in early embryonic, (2) in later life ?

8. To what subdivisions of the animal kingdom are the Entozoa referred ? Mention their leading peculiarities of structure and development. Enumerate the species most commonly found in man.

FIRST EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1867.

No. III.

Practical Chemistry.

1. What are the substances contained in the tubes A, B, and C ?

2. What gas is contained in each of the bottles D and E ?

3. Examine the solution F for oxalic acid, and the solution G for antimony or arsenic.

FIRST EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1867.

No. IV.

Chemistry.

1. What is meant by a combustible substance?

2. Give an account of the physical and chemical changes which constitute the burning of a candle.

3. How is bleaching-powder made? What are its chief properties?

4. Write equations expressing the changes which take place when chlorate of potash, nitrate of ammonia, and carbonate of lime, are decomposed by heat; also when zinc, magnesia, and alumina, are dissolved in hydrochloric acid.

5. How is the atomic theory related to the laws of definite and of multiple proportions?

6. What are the relative specific gravities of carbonic acid, carbonic oxide, nitrous oxide, air, ammonia, olefiant gas, and the vapours of alcohol and ether?

7. Name some fluids that are heavier and some that are lighter than water.

8. What is steel? Give a short account of the processes by which it is obtained from an ore of iron.

9. How would you examine a sample of water suspected of sewage contamination?

10. Describe iodine. Whence is it derived?

11. In what forms does carbon appear?

12. How may a liquid be tested for hydrocyanic acid, and the quantity present be estimated?

FIRST EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1867.

No. V.

Physics.

1. If two parallel forces act upon a rigid body in *opposite* directions, state how to determine the magnitude and position of their single resultant.

Discuss the case in which the two forces become equal in magnitude.

Describe the arrangement and action of the muscles by which the motion of the eye-ball is produced.

2. When a force produces motion in a body, how is the *work* done expressed in terms of the force and the circumstances of the motion? Explain generally the appropriateness of this expression.

When a man walks along a horizontal road, in what way does he perform *work?*

3. If a body falls in vacuo, express the velocity, and the distance of the body from the starting point, at any instant in terms of the time which has elapsed since motion commenced.

Account for the comparatively small velocity of a drop of rain when it reaches the earth, and state what is the *effective force* upon the drop at that time.

4. Describe some experiment illustrating the property, possessed by a fluid, of transmitting pressure applied to it equally in all directions.

Should the pulse occur simultaneously in all parts of the body? What is the result of experiment on this point?

5. Enunciate Boyle's law connecting the volume and tension of a gas.

Explain the process of respiration, as far as it is due to the motion of the Diaphragm.

Assuming the lungs to contain 1600 cubic centimetres of air at the termination of an expiration, and 400 cubic centimetres to be introduced by each inspiration, if, after an expiration a vertical tube be placed in the mouth, with its lower end dipping in mercury, and, the nose being stopped, the act of inspiration be performed, to what height will the mercury rise in the tube? The height of the mercury in the barometer being 760 m.m., and the air in the tube being neglected.

6. How are differences of *quality* in musical sounds of the same pitch accounted for?

Describe briefly the apparatus in the human ear which, it seems probable, is employed in producing the sensation of *quality* in musical sounds.

7. Describe the way in which an image of an object is formed by a convex lens, and state the relation between the distances of the object and image from the lens.

In what way is the eye enabled to produce, upon the retina, distinct images of objects at different distances from it?

8. Describe the common thermometer, and the way in which it is graduated.

To what change is a thermometer liable, which produces errors in the indications of the instrument?

9. Define the *specific heat* of a body.

If 100 grammes of iron be boiled for some time in water, when the height of the barometer is 760 m.m., and be then quickly transferred to a vessel containing 150 grammes of water at 10°C, what will be the common temperature of the iron and water? It being assumed that no heat is lost, that a gramme of hot water adheres to the iron when it is transferred to the cold water, and that the specific heat of iron is 0.114.

10. Explain how a person may be knocked down in a thunderstorm without being actually struck by lightning.

11. If round an electromagnet, a quantity of insulated wire be coiled, in the same way as the coil of the magnet itself, and the ends of this wire be connected with the terminals of a multiplying galvanometer, describe what takes place, when a current is sent round the coil of the magnet, and when this current is stopped.

FIRST EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1867.

No. VI.

Botany.

1. Refer to their respective orders the flowers on the table. State your reasons for the positions you assign to them.

2. What is the meaning of the terms :—Rhizome—Spathe —Perianth—Involucre—Sepal—Umbel ?

SECOND EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1867.

No. I.

Materia Medica.

1. What are the most commonly used preparations of Iron, and in what form does the metal exist in them?

2. How is Sulphate of Quinia prepared, and what are the tests of its purity given in the British Pharmacopœia?

3. What parts of the following plants are directed by the British Pharmacopœia to be used; viz., *Sambucus*, *Scilla*, *Rosa Gallica*, *Pterocarpus*, *Physostigma venenosum*, *Theobroma Cacoa*, *Croton Tiglium*, *Taraxacum*.

4. What is the active agent in the various means of producing blisters on the skin, and by what physiological processes do they act beneficially?

5. 'A remedy must be absorbed before it can exert any remote action on the Animal Economy.'
Is this true? Illustrate the statement.

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6. Describe the articles of Materia Medica placed on the table and labelled A, B, C, D, E.

SECOND EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1867.

No. II.

Pathology.

1. Enumerate the principal pathological conditions in which the urine is found to be albuminous, and account for the phenomenon in each case.

2. What are the chief morbid changes found in epileptics after death?

3. What is meant by 'Amyloïd disease,' and in which of the viscera is it found?

4. What are the causes of Vomiting, and in what way do they produce that phenomenon?

5. What are the modes and causes of sudden Death?

6. By what process are new Blood Vessels formed in a Wounded Part.

7. What minute structural changes are classed under the term Hypertrophy? Give illustrations of Hypertrophy in various organs in early and in later stages.

8. What is understood by 'Atelectasis pulmonum,' and with what other affections might it be confounded?

9. What are the peculiarities of Pneumonia in the infant as distinguished from the same disease in the adult?

SECOND EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1867.

No. III.

Therapeutics.

1. Under what circumstances would you resort to blood letting, general or local, and with what intention?

2. Describe a typical case of chorea. What are the usual causes of this complaint, and what would be your treatment under various circumstances?

3. What would you do in cases of *Pityriasis versicolor*, *Tinea decalvans*, and *contagious Ringworm*, and what common principle runs through their rational treatment?

4. What circumstances would guide your recommendation of Paracentesis thoracis in a case of fluid in the pleura?

5. What are the doses of Alcohol which may be advantageously given in various forms of Fever? Describe the symptoms which regulate its administration.

6. How do you treat severe Haemoptysis in a Phthisical person?

7. What guides you in the treatment of chronic Vomiting —on what may it depend—and in what manner do you proceed according to your diagnosis?

SECOND EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1867.

No. IV.

Forensic Medicine and Hygiene.

1. What proceeding would you adopt to ascertain if a stain was that of human blood or not?

2. What measures are required by our law before a person can be confined in a lunatic asylum?

3. How would you ascertain from the aspect of a wound in a corpse whether it had been inflicted during life?

4. What are the symptoms of poisoning by Strychnia?

5. What is the longest period of proved non-intercourse between a husband and wife legally consistent with the legitimacy of a child?

6. What are the ascertained causes of Typhoïd Fever?

7. What is the best mode of removing human excrements and other waste organic matter in an urban population?

8. What diseases are engendered by impurities of Air? What are the most usually found impurities in the Air? And how do you detect them?

SECOND EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1867.

No. V.

Clinical Examination.

1. Write a Report on the cases of , and of , in Ward, with your Diagnosis, Prognosis, and the Treatment you would propose.

2. Describe the Surgical Instruments placed in the Clinical Room, and their uses.

3. In the case of Aphonia, in the same room, are the vocal Chords diseased? How have you ascertained their condition?

4. What is the condition of the Retina in the case of as determined by the Ophthalmoscope?

SECOND EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1867.

No. VI.

Surgery. Midwifery.

1. What are the varieties of Dislocation of the Shoulder-joint, and what are the principles of treatment.

2. Distinguish between Hydrocele and Scrotal Hernia.

3. Classify the Tumours called 'Malignant.'

4. What are the modes adopted for the cure of Hæmorrhoïds? Describe the most frequent causes of the affection.

5. What is Astigmatism? how is it detected? and how remedied?

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6. What are the causes of Phlegmasia dolens, and how would you treat it?

7. There is occasional Hæmorrhage from the Vagina during the last half of Pregnancy. Upon what causes may this depend? State the treatment to be adopted during the later months, and at or near the full term.

8. What are the causes, consequences, and treatment of retained Placenta?

SECOND EXAMINATION

FOR THE

DEGREE OF BACHELOR OF MEDICINE.

Oxford, December, 1867.

No. VII.

Classical Paper.

Translate :—

Celeres enim, vel acutae passiones, etiam sponte solvuntur, et nunc fortunâ nunc naturâ favente. Quo fit ut ignari homines elati saepe medicos fugiant, et hos proventus incantationibus novis ac ligamentis adscribant, aut fortunae ; pelluntur enim (celeres passiones) aut fluore sudoris, aut sanguinis per nares, aut ventris. Chroniae autem, vel tardae passionis morbi, qui jam praejudicio quodam corpora possederint, solius medici peritiam poscunt, cum neque naturâ, neque fortunâ solvantur.

e Caelii Aureliani Morb. Chron. Praefatione.

Κοιλίη, σπλάγχνον πεπτήριον, κάμνει τὴν πέψιν, ὁκότε διάῤῥοια τὸν ἄνθρωπον ἴσχει· καὶ ἔστιν ὑγρῆς τροφῆς ἀπέπτου ἡ διάῤῥοια· ἢν μὴ ἐπὶ σχεδίου τῆς αἰτίης γίγνοιτο τόδε ἐς μίην ἢ δευτέρην ἡμέρην μούνην. Ὅλος ὁ ἄνθρωπος ἀσθενέει, ἀτροφίη τοῦ σκήνεος, χρονίη νοῦσος ἡ κοιλιακὴ γίγνεται, ἀτονίη τοῦ πέψοντος θερμοῦ, καὶ ψύξει τῆς κοιλίης· εὖτε λύεται μὲν ἐς θερμὸν ἡ τροφή, ἀλλ' οὐκ ἐκπέσσει θερμὸν, οὐδὲ ἐς χυμὸν οἰκεῖον τρέπει, ἡμιτελέα δὲ λείπε-

[Turn over.

ἀδρανείῃ τοῦ τέλεος· ἡ δὲ ἀφεθεῖσα τῆς ἐργασίης ἐς κακὸν ἀλλοιοῦται καὶ χροιῇ, καὶ ὀδμῇ, καὶ συστάσι. Λευκὴ μὲν γὰρ καὶ ἄχολος ἡ χροιή· κάκοδμα δὲ καὶ βορβορώδεα· ὑγρὴ δὲ καὶ ἀσύστατος ἀπραγίη, μοῦνον δὲ ἀρετὴν ἴσχουσα τῆς πέψιος τὴν ἀρχήν· διὰ τόδε φυσώδεες ἐς τὴν γαστέρα ἐρυγαὶ ξυνεχέες κακώδεες.

ex Aretaei de causis et signis morborum diuturnorum Libri Sec. cap. 7mo.

Give a brief account of the History of Blood-letting from ancient to modern times. Explain the changes of opinion in respect of it.